

### **REMARKS**

Claims 1, 10, 18 and 19 are pending in the application. Claims 1 and 10 have been amended herein, and claims 18-19 added. Claims 2-9 and 11-17 have been canceled. Favorable reconsideration of the application, as amended, is respectfully requested.

In response to the objection to the drawings, applicants have amended Figs. 5 and 10 to include the legend "Conventional Art". Additionally, applicants have amended the title of the invention as requested by the Examiner.

Claims 1 and 10 have been amended to incorporate features of original claim 8. Specifically, claims 1 and 10 recite the features wherein the start position of the first pulse that is included in a recording mark making period of the write pulse waveform is shifted according to the length  $x$  of a code associated with the recording mark making period; and wherein the write pulse waveform in the recording mark making period corresponding to codes with code lengths  $x$  of  $n+2$  or more includes write pulses, of which the number is equal to the quotient obtained by dividing  $x$  by two. (See, e.g., adaptive mark compensation at pages 66-67 of the present application; and portions (e)-(j) of Fig. 12). New claims 18-19 recite similar features in conjunction with the storage medium and reproducing the data recorded on the storage medium.

#### ***I. CLAIM OBJECTIONS***

Claims 1, 2, 4, 5, 9, 10, 12, 14 and 17 are objected to by the Examiner. Specifically, the Examiner suggests that the claims be amended to replace "n", "n+1", "n+2" and "n+3" with  $-nTw--$ ,  $-(n+1)Tw--$ ,  $-(n+2)Tw--$  and  $-(n+3)Tw--$ , respectively.

Applicants have amended claims 1 and 10 to recite the relationship between the code length, detection window width and mark length. In particular, claims 1 and 10 have been amended to recite that the respective codes included in the NRZI data have corresponding code lengths  $x$  (where  $x$  is an integer equal to or greater than one). The

code lengths  $x$  correspond to mark lengths of  $xT_w$  (where  $T_w$  is a detection window width). If the shortest code length of the NRZI data is  $n$  (where  $n$  is an integer equal to or greater than one), the invention includes assigning a write pulse waveform that has only one write pulse to recording mark making periods corresponding to codes with code lengths  $x$  of  $n$  and  $n+1$ , and a write pulse waveform that has multiple write pulses to recording mark making periods corresponding to codes with code lengths  $x$  of  $n+2$  or more, respectively. (See, e.g., Figs. 11 and 12 of the present application).

Accordingly, applicants respectfully submit that the above amendments address any concerns giving cause to the objection. Withdrawal of the objection is respectfully requested.

## **II. REJECTION OF CLAIMS 1-3, 5-13 AND 15-17 UNDER 35 USC §102(e)/103(a)**

Claims 1-3, 5-13 and 15-17 stand rejected under 35 USC §102(e) or §103(a) based on *Ito et al.* alone or in combination with one or more secondary references. Applicants respectfully request withdrawal of the rejections for at least the following reasons.

The present application is based on International Application PCT/JP2004/004224, and claims priority to Japanese Patent Application Nos. 2003-101248 and 2003-279108 filed on April 4, 2003 and July 24, 2003. Subject to applicants perfecting their claim for priority, the present application is entitled to an effective filing date of April 4, 2003 and July 24, 2003.

*Ito et al.* has a filing date of December 9, 2003, which is subsequent to applicants' priority dates of April 4, 2003 and July 24, 2003. In order to perfect their claim for priority and remove *Ito et al.* as a reference, applicants submit herewith verified English translations of priority documents Japanese Patent Application Nos. 2003-101248 and 2003-279108. Support for the present claims, as amended, is found in Japanese Patent Application No. 2003-279108, filed on July 24, 2003.

In view of the removal of *Ito et al.* as a reference, applicants respectfully request withdrawal of each of the rejections.

### **III. INFORMATION DISCLOSURE STATEMENT**

Applicants submit herewith an Information Disclosure Statement citing art recently cited in a corresponding European application. In addition, applicants cite commonly owned US Patent No. 7,272,095 and related continuation applications based thereon, namely US Application Nos. 11/842,185; 11/928,308; and 11/928,340.

Consideration of the Information Disclosure Statement and the references cited therein is respectfully requested.

### **IV. CONCLUSION**

Accordingly, all claims are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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DATE: May 27, 2008

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